

# GREEN POWER News

WAPA's Renewable Resources Program covering  
green power, reports, studies and funding

## WESTERN AREA POWER ADMINISTRATION

Welcome to the *Green Power News Update*. This is a summary of the stories that ran during **August 2017**. New stories are added throughout the month to make sure you always know what is happening in our fast-changing industry. Check back often to see what's new!

*Individuals or agencies sending press releases quoted here are entirely responsible for the accuracy of their information.*

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## Green Power

### **Silicon Valley Power Recognized as Top 10 National Green Power Leader by U.S. Department of Energy**

Silicon Valley Power's (SVP) green power program, Santa Clara Green Power, has once again been honored as one of the Top 10 utility green power programs in the nation by the National Renewable Energy Laboratory (NREL), the U.S. Department of Energy's primary national laboratory for renewable energy and energy efficiency research and development. This is the eleventh year that SVP's Santa Clara Green Power program has made the esteemed Top 10 list and the second year in a row it has ranked in the top 10 in three out of four green power categories – percentage of customer participation, green power sales as a percentage of total utility retail electricity sales, and total green power sales.

*Source: Silicon Valley Power, 8/15/17*

### **CESA Releases Solar Consumer Education Video Series**

The Clean Energy States Alliance (CESA), in conjunction with the George Washington University Solar Institute, has released three short videos for consumers who are considering adopting solar:

- **Rooftop Solar Financing 101** introduces three common solar financing methods: loans, leases, and power purchase agreements (PPAs) and briefly explains some of the advantages and disadvantages of each.
- **Choosing a Solar Installer** offers advice for customers in selecting a solar contractor, questions that customers should ask a solar contractor, and information that should be included in a solar contractor's bid.
- **Will Solar Panels Save You Money?** discusses key questions homeowners should explore when assessing whether going solar makes financial sense, including how the cost of solar compares to savings from solar, how the federal tax credit works, and the extent to which a homeowner's electricity bill can be offset by solar.

The videos are free. States and municipalities and other solar stakeholders are encouraged to share the videos and to use them as resources on their websites.

*Source: Clean Energy States Alliance, 8/11/17*

### **The CESA Brief**

#### **August 2017**

The CESA Brief e-newsletter provides periodic updates about the programs and accomplishments of the Clean Energy States Alliance (CESA) and its member organizations.

*Source: Clean Energy States Alliance, 8/7/17*

### **Vehicle-Grid Interoperability**

As plug-in electric vehicles (EVs) become more common, the challenges to managing their interactions with the power grid increase accordingly. Argonne researchers provide support to emerging technology development in grid connectivity, bridging the needs of the EV manufacturers and the utility companies that supply electricity. This research and development effort focuses on practical applications that will enhance market acceptance of plug-in vehicles and their charging infrastructure.

*Source: Argonne National Laboratory, 8/1/17*

## **Hydro Newsletter - Volume 4, Issue 8**

- Lack of FERC Quorum Continues
- Legislative Update
- Fourth Circuit Holds That Licensees Need Not Maximize Recreation Development

The professionals at Van Ness Feldman possess decades of experience covering every aspect of hydroelectric development, ranging from licensing, environmental permitting, regulatory compliance, litigation, transmission and rates, public policy, transactions and land use planning. If you would like additional information on the issues touched upon in this newsletter, please contact any member of the firm's [hydroelectric practice](#).

*Source: Van Ness Feldman, 7/31/17*

**Find more [publications and webinars](#).**

## **Reports and Studies**

### **Identifying Potential Markets for Behind-the-Meter Battery Energy Storage: A Survey of U.S. Demand Charges**

This collaborative paper by the National Renewable Energy Laboratory (NREL) and Clean Energy Group details the first comprehensive public analysis of the potential size of the commercial behind-the-meter battery storage market in the United States. The researchers analyzed representative building load profiles against more than 10,000 utility tariffs, finding that over 25 percent of commercial customers across the country may be able to cost-effectively reduce their utility bills with battery storage technologies today.

*Source: Clean Energy Group, 8/28/17*

### **NREL Updates Baseline Cost and Performance Data for Electricity Generation Technologies**

The Energy Department's National Renewable Energy Laboratory (NREL) has released the 2017 Annual Technology Baseline (ATB), updating a key source of reliable electricity generation technology cost and performance data used to support and inform electric sector analysis in the United States. Now in its third year, the ATB documents technology-specific information on a broad spectrum of electricity generation technologies, including wind, solar, geothermal, hydropower, biomass, coal, natural gas, and nuclear.

The Annual Technology Baseline, which is supported by hundreds of literature citations, will be highlighted in a webinar on August 29, at 11 a.m.–1 p.m. MDT (1-3 p.m. EDT). Presenters will describe analytical products in detail, share examples of how they have been used, and provide an opportunity for attendees to ask questions. [Register for the webinar](#) .

*Source: National Renewable Energy Laboratory, 8/24/17*

### **NREL Analysis Identifies Where Commercial Customers Might Benefit from Battery Energy Storage**

After upfront costs, batteries may reduce operating costs for customers paying demand charges

Commercial electricity customers who are subject to high demand charges may be able to reduce overall costs by using battery energy storage to manage demand, according to research by the U.S. Department of Energy's National Renewable Energy Laboratory (NREL).

The analysis represents the first publicly available survey of commercial-sector demand charges across the United States. By determining locations where comparatively high demand charges are currently in place and the number of customers that may be paying them, researchers provide insight into commercial battery storage market potential across the United States.

The white paper, [Identifying Potential Markets for Behind-the-Meter Battery Energy Storage: A Survey of U.S. Demand Charges](#), details an analysis of more than 10,000 utility tariffs in 48 states. The findings indicate that approximately 5 million commercial customers across the country may be able to achieve electricity cost savings by deploying battery storage to manage peak demand.

*Source: National Renewable Energy Laboratory, 8/24/17*

### **Priority Considerations for Interconnection Standards**

The power grid is much like our network of country roads and highways, carrying energy from its origin to its final destination. Interconnection standards are, in effect, the "rules of the road" set by policymakers, which both system owners and utilities must follow to keep traffic flowing smoothly. The quality of these rules facilitates an easy free-flow of traffic, or result in unnecessary gridlock.

This new quick reference guide serves as a supplement to IREC's Interconnection Model Rules, with key considerations for states working to improve/update interconnection procedures. Each section offers a description of the key components to interconnection based on established and well-vetted national best practices.

*Source: Interstate Renewable Energy Council, August 2017*

### **Annual Wind Power Report Confirms Technology Advancements, Improved Project Performance, and Low Wind Energy Prices**

Wind energy pricing for land-based, utility-scale projects remains attractive to utility and commercial purchasers, according to an annual report released by the U.S. Department of Energy and prepared by the Lawrence Berkeley National Laboratory (Berkeley Lab). Prices offered by newly built wind projects in the United States are averaging around 2¢/kWh, driven lower by technology advancements and cost reductions.

"Wind energy prices--particularly in the central United States, and supported by federal tax incentives--are at all-time lows, with utilities and corporate buyers selecting wind as the low-cost option," said Berkeley Lab Senior Scientist Ryan Wiser.

*Source: Lawrence Berkeley Laboratory, 8/14/17*

### **Wind-Wildlife Updates: News, Upcoming Event Details, and New Resources**

Keep up with the latest information on sustainable wind-wildlife solutions. Also, learn about **conferences and educational events** coming to your area.

*Source: American Wind Wildlife Institute, 7/31/17*

### **New Study on Demand Charges Savings from Commercial Solar**

Lawrence Berkeley National Laboratory (Berkeley Lab) and the National Renewable Energy Laboratory (NREL) are collaborating in a series of studies to understand how solar PV can reduce demand charge levels for a variety of customer types and demand charges designs. Previous work focused on residential customs with solar. This study, instead, focuses on commercial customers and seeks to understand the extent and conditions under which rooftop can solar reduce commercial demand charges. To answer these questions, we simulate demand charge savings for a broad range of commercial customer types, demand charge designs, locations, and PV system characteristics. This particular analysis does not include storage, but a subsequent analysis in this series will evaluate demand charge savings for commercial customers with solar and storage.

Highlights of this work will be presented through a webinar, on Wednesday, August 16, at 9:00 AM Pacific Time. Please **register** in advance.

*Source: Lawrence Berkeley Laboratory, 7/31/17*

### **ENERGY STAR® Program Requirements for Electric Vehicle Supply Equipment**

Following are the terms of the ENERGY STAR Partnership Agreement as it pertains to the manufacture and labeling of ENERGY STAR certified products. The ENERGY STAR Partner must adhere to the following partner commitments:

- Certifying Products
- Using the ENERGY STAR Name and Marks
- Verifying Ongoing Product Certification
- Providing Information to EPA

- Training and Consumer Education
- Performance for Special Distinction

*Source: EPA Energy Star Program, 8/1/17*

**Find more [publications and webinars](#).**

## Funding

### **Sept. 5 webinar provides networking opportunity to applicants for CEC industrial energy efficiency grant**

**3-4 PM MT**

Interested in finding partners for research funding opportunities?

The California Energy Commission will moderate a one-hour, virtual networking webinar on Tuesday, Sept. 5, for individuals interested in applying for grant funding under GFO-17-501 "Improving Natural Gas Energy Efficiency, Waste Heat-to-Power, and Near-Zero Emission Distributed Generation Systems."

The aim of the webinar is for individuals subscribed to this LinkedIn Subgroup to network and potentially form project teams for this funding opportunity. Potential applicants are encouraged to participate to leverage connections and form partnerships that could lead to stronger proposals.

**Learn more about solicitation requirements.**

*Source: California Energy Commission, 8/28/17*

### **Funding available for building tribal energy development capacity**

**Deadline: Oct. 9, 2017**

The Assistant Secretary - Indian Affairs for the Department of the Interior, through the Office of Indian Energy and Economic Development, Division of Energy and Mineral Development is soliciting grant proposals from federally recognized Indian Tribes, Alaska Native Villages, regional or village corporations, tribal organizations, and Tribal Energy Resource Development Organizations to build tribal capacity for energy resource development or management.

For this program, capacity building refers to developing organizational structures, business entity structures, or developing or enhancing regulatory functions, all related to tribal energy development for the purpose of strengthening tribal capacity for development and management of energy projects.

**See the FOA.**

*Source: Van Ness Feldman, 7/11/17*

## **Proposals for improving undergraduate STEM education requested**

**Applications Due: Oct. 10, 2017**

Improving Undergraduate STEM Education: Pathways into Geoscience invites proposals that specifically address the current needs and opportunities related to undergraduate education within the geosciences community. The primary goal of the IUSE: GEOPATHS funding opportunity is to increase the number of undergraduate students interested in pursuing undergraduate degrees and/or post-graduate degrees in geoscience through the design and testing of novel approaches for engaging students in authentic, career-relevant experiences in geoscience. In order to broaden participation in the geosciences, engaging undergraduate students from traditionally underrepresented groups or from non-geoscience degree programs is a priority.

The IUSE: GEOPATHS solicitation features two funding tracks:

1. Engaging students in the geosciences through extra-curricular experiences and training activities (GEOPATHS-EXTRA), and
2. Improving pathways into the geosciences through institutional collaborations and transfer (GEOPATHS-IMPACT).

**See the FOA.**

Estimated Total Program Funding: \$5 million

*Source: Van Ness Feldman, 7/11/17*

**Find more [funding sources](#).**